

I. Claim:

1. A rotor disc for use in an electrical machine has at least one circumferential rotor rim mounted thereon, the rotor rim comprising at least one row of alternate magnets and laminated pole pieces, the laminations in each pole piece being supported by at least one bolt which extends through the rotor disc, a clearance gap being provided to electrically insulate the laminations from the bolt passing therethrough.
2. A rotor disc as claimed in claim 1 in which the clearance is provided by mounting the laminations concentrically on the bolt in a radially spaced relationship.
3. A rotor disc as claimed in claim 1 in which the laminations are bonded together to form a stack.
4. A rotor disc as claimed in claim 3 in which the stack of bonded laminations is mounted concentrically on the bolt in a radially spaced relationship by the provision of annular members which are insulated at either end of the stack.
5. A rotor disc as claimed in claim 4 in which the insulated annular members are recessed into either end of the stack.
6. A rotor disc as claimed in claim 4 in which the insulated annular members are resilient.
7. A rotor disc as claimed in claim 6 in which the annular members are formed from an elastomeric material.
8. A rotor disc as claimed in claim 1 in which means are provided on the bolt for compressing the laminated pole pieces.
9. A rotor disc as claimed in claim 8 in which the means for compressing the laminated pole pieces is resilient to maintain the correct compressive force on the laminated pole pieces throughout operation.
10. A rotor disc as claimed in claim 9 in which the means for compressing the laminated pole pieces are nuts and sprung washers.